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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,612	01/26/2004	Michael Rys	MS147213.02/MSFTP1469USA	8929
27195	7590	10/03/2006	EXAMINER	
AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			WU, YICUN	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,612

Applicant(s)

RYS ET AL.

Examiner

Yicun Wu

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

III. DETAILED ACTION

1. Claims 1-49 are presented for examination.

Claim Objections

2. Claim 31 is objected to because of the following informalities: claim 31 depends on claim 30 which is a medium claims. Appropriate correction is required.

Claim 45 is objected to because of the following informalities: method claim 45 depends on claim 30 which is a medium claims. Appropriate correction is required.

Claims 46-47 are objected to because of the following informalities: method claims 46-47 depends on claim 32 which is a medium claims. Appropriate correction is required.

Claim 48 is objected to because of the following informalities: method claim 48 depends on claim 33 which is a medium claims. Appropriate correction is required.

Claim 49 is objected to because of the following informalities: method claim 49 depends on claim 37 which is a system claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation “converting the rowset back into a second hierarchical data stream without loss of data” in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

Claims 1-14 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter,

specifically, the claims are not directed towards the final result that is “useful, tangible and concrete (See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

According to the New Guidelines of October 26, 2005, which states that “A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33

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F.3d at 1544, 31 USPQ2d at 1557)... a specific machine to produce a useful, concrete, and tangible result (State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

Examiner requests Applicant to include in Applicant's claimed limitations (in all the claims) the following:

Claim limitation describing --

- 1. What is the practical application?*
- 2. What is final result which Applicant considers concrete, useful and tangible?*

Because the “practical application, result, concrete, useful and tangible” limitations are not claimed in Applicant's claims, Examiner asserts that the above listed claims are nonstatutory.

Claims 30-36 and 45-48 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, directed towards “computer readable medium”.

Page 16, paragraph [0048] is evidence that Applicant intends for “computer readable medium” to include embodiments where the medium is not limited to the media that the Office believes are capable of realizing the underlying functionality of the instructions.

Specifically, while the volatile and not-volatile embodiments would be statutory, the transmission media as described in the specification is not believed to be covered by any of the statutory categories of invention nor would it enable any underlying functionality to be realized. Note that deleting subject matter from the specification may raise the issue of new matter. However, rephrasing is permissible in accordance with MPEP 2163.07.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-49 are rejected under 35 U.S.C. 102(e) as being anticipated over Cheng et al., (U.S. Patent No. 6,366,934).

As to claim 1, Cheng et al. discloses a computerized system that transforms hierarchical data into a rowset (col. 3, lines 35-60), the system comprising:

a parser that parses the hierarchical data to form an active store(i.e. XML parser. Col. 10, lines 30-40); and

a query processor that receives a query (i.e. DB2's Select. Col. 4, lines 7-19) of a database query language (i.e. DB2's Select. Col. 4, lines 7-19) including a number of metaproperties (i.e. the UDFs 144 may be included in SQL statements to describe properties of XML documents via DB2XML attribute values, to search for element content or XML attribute values by specifying the structural path, or to search for XML documents by a structural search on both path and content.. col. 8, lines 15-20) and that uses the query in selecting data (i.e. DB2's Select. Col. 4, lines 7-19) from the active store to form the rowset (i.e. DB2's Select. Col. 4, lines 7-19).

As to claim 2, Cheng et al. discloses a computerized system wherein the parser comprises:

a module that converts the hierarchical data (i.e. XML documents. Col. 3, lines 35-60) to an internal representation in the active store (i.e. database system. Col. 3, lines 35-60).

As to claim 3, Cheng et al. discloses a computerized system, wherein the internal representation is a document object model (DOM) (fig. 11).

As to claim 4, Cheng et al. discloses a computerized system wherein the internal representation is an edge table (fig. 10-12).

As to claim 5, Cheng et al. discloses a computerized system wherein the hierarchical data is XML data (col. 3, lines 35-60).

As to claim 6, Cheng et al. discloses a computerized system wherein the module comprises:

a module that identifies nodes in the hierarchical data (fig. 10-12).

As to claim 7, Cheng et al. discloses a computerized system wherein the query comprises:

a Structured Query Language (SQL) statement (col. 3, lines 35-60).

As to claim 8, Cheng et al. discloses a computerized system wherein the Structured Query Language (SQL) statement comprises:

a SELECT statement (i.e. select. col. 4, lines 1-20).

As to claim 9, Cheng et al. discloses a computerized system, wherein the query includes row information and the column information comprising:

a row pattern and one or more column patterns that identifies information in the XML active store (col. 14, lines 15-38).

As to claim 10, Cheng et al. discloses a computerized system, wherein the hierarchical data is XML data (col. 3, lines 35-60).

As to claim 11, Cheng et al. discloses a computerized system, wherein the hierarchical data is SGML data (col. 14, lines 15-38).

As to claim 12, Cheng et al. discloses a method comprising:

Identifying (i.e. conditional select. col. 21, lines 1-30 and col. 22, lines 1-22)

row and column information in hierarchical data using a database query language (col. 21, lines 1-30 and col. 22, lines 1-22)

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As to claim 13, Cheng et al. discloses a method wherein identifying row and column information in the hierarchical data comprises:

using a row pattern to identify row information in the hierarchical data (col. 21, lines 1-30 and col. 22, lines 1-22); and

using a column pattern to identify column information in the hierarchical data (col. 21, lines 1-30 and col. 22, lines 1-22).

As to claim 14, Cheng et al. discloses a method wherein using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset comprises:

using a parent ID metaproperty (fig. 10-12) in transforming the hierarchical data (i.e. XML. col. 21, lines 1-30 and col. 22, lines 1-22) into a rowset (i.e. result. col. 21, lines 1-30 and col. 22, lines 1-22).

As to claim 15, Cheng et al. discloses a method wherein using a parent ID metaproperty in transforming the hierarchical data into a rowset comprises:

using the parent ID metaproperty (fig. 10-12) in forming an edge table (fig. 11) for use in transforming the hierarchical data into a rowset (col. 21, lines 1-30 and col. 22, lines 1-22).

As to claim 16, Cheng et al. discloses a method wherein using a number of metaproperties and the row and column information in transforming the hierarchical data into a rowset comprises:

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using a parent ID metaproperty (fig. 10-12) and a parent metaproperty (fig. 10-12) in transforming the hierarchical data into a rowset (col. 21, lines 1-30 and col. 22, lines 1-22).

As to claim 17, Cheng et al. discloses a method further comprising:
processing the rowset using relational techniques to form a second rowset (col. 3, lines 34-60) and (col. 16, lines 30-39).

As to claim 18, Cheng et al. discloses a method further comprising:
transforming the second rowset into a second hierarchical data stream (col. 3, lines 34-60) and (col. 16, lines 30-39).

As to claim 19, Cheng et al. discloses a method further comprising:
identifying and using implicit data in transforming the hierarchical data into a rowset (col. 3, lines 34-60) and (col. 16, lines 30-39).

As to claim 20, Cheng et al. discloses a method comprising:
forming a rowset (i.e. structured documents. (col. 3, lines 34-60) and (col. 16, lines 30-39) from an XML data file (col. 3, lines 34-60) and (col. 16, lines 30-39); and
adding overflow data to the rowset to form a second rowset (col. 3, lines 34-60) and (col. 16, lines 30-39).

Other Prior Art Made of Record

9. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions.

Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov [<http://www.uspto.gov/>](http://www.uspto.gov/)), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

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As to claim 21, Cheng et al. discloses a method wherein forming a rowset from an XML data file comprises:

forming a query including a number of metaproperties query (i.e. SQL statements to describe properties of XML documents via DB2XML attribute values, to search for element content or XML attribute values by specifying the structural path, or to search for XML documents by a structural search on both path and content. Col. 8, lines 15-25); and

processing the XML data file using the query to form the rowset (col. 3, lines 34-60) and (col. 16, lines 30-39).

As to claim 22, Cheng et al. discloses a method wherein adding overflow data to the rowset to form a second rowset comprises:

adding a column (i.e. XML column. Col. 8, lines 50-55) to the rowset in which to include the overflow data (process and store XML document. Col. 8, lines 50-55).


8. As to claims 23-49, the limitations of these claims have been noted in the rejection above. They are therefore rejected as set forth above.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yicun Wu whose telephone number is 571-272-4087. The examiner can normally be reached on 8:00 am to 4:30 pm, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Yicun Wu 
Patent Examiner
Technology Center 2100

September 25, 2006